

## Sandy Bottom Nature Park Fisheries Management Report 2003

This 456-acre park was established in the early 90s and houses a diversity of habitats, plants and animals. There is a wetland mitigation project near completion that will result in the creation of 52 acres of wetlands. The 12-acre fishing pond located in this park was formed from a borrow pit that was originally mined to help with the construction of Interstate 64.

The park offers a variety of activities for outdoor enthusiasts. There are trails for biking and hiking and a newly created multipurpose trail that will accommodate hiking, biking and horse riding. Facilities include boat rental, a fishing pier, picnic areas, primitive camping area and tent cabins.

The fish population of the pond was sampled in May of 2002 using an electrofishing boat. This method of sampling the shoreline relies on using an electric current to stun the fish, which can then be picked up, assessed and released.

This is essentially a bass and bluegill dominated fishery with very low numbers of other species. Having said that, the population characteristics of bass and bluegill were less than desirable. Both showed reasonable abundance of juveniles, but very few large adults were caught. Bass over 14" in length were uncommon and there were very few bluegill over 5" in length.

The pond is difficult to sample with boat electrofishing because the water is so clear that the fish have some opportunity to avoid the gear, however this alone would not account for the low abundance of fish recorded since our surveys began in 1995. The answer probably lies with the fact that this pond lacks sufficient nutrients to support a thriving fishery. This is indicated by our Secchi depth data which can be used as an indicator of primary productivity. In simple terms, the clearer the water in a pond or lake, the lower is the abundance of phytoplankton (which is the basis of the food web) and the less productive the fishery is likely to be. Of course, low Secchi depth readings could also be due to suspended matter (e.g., silt, pigments) and so chlorophyll analysis would need to be done if that were the case. Secchi depths of over 11 feet have been recorded in the fishing pond since 1995 and this can be equated with low levels of phytoplankton production. The feasibility of a liming and fertilization program should be examined.

Channel catfish have been stocked here for 5 years (1997 to 2001), but the evidence so far indicates that survival has been poor. As a result, channel catfish stocking has been terminated.

The park is open from sunrise to sunset every day except Christmas, however the fishing pier is open to pedestrians for fishing 24 hours a day. It is located at 1255 Big Bethel Road, a few minutes from I-64 by way of the Hampton Roads Center Parkway West exit. For further information call the park office at 757 825 4657 or try the web site at www.hampton.va.us/sandybottom.